Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A patch for tooth whitening, comprising a tooth-adhering layer (1) containing erodible polymer complexes formed by hydrogen bonding of a polymer with a carboxyl group (-COOH) and a polymer with a carbonyl group (-C=O) or ether group (-O-) and a tooth whitening agent; and an erosion rate-controlling layer (2) containing a mixture of a hydrophilic polymer and a film-forming polymer.

2. (Currently Amended) The patch as set forth in claim 1, wherein, in the tooth-adhering layer, the polymer with the carboxyl group is selected from the group consisting of polyacrylic acid, polymethacrylic acid, (meth)acrylic acid, a (meth)acrylic acid copolymer ~~(Eudragit L, Eudragit S, Kollicoat P)~~, a poly alkyl vinyl ether-maleic acid copolymer, alginic acid and hyaluronic acid; and the polymer with the carbonyl group or ether group is selected from the group consisting of polyvinylpyrrolidone, polyethylene oxide, polypropylene oxide and a polypropylene oxide-polyethylene oxide copolymer.

3. (Original) The patch as set forth in claim 2, wherein the polymer with the carboxyl group is the (meth)acrylic acid copolymer, and the polymer with the carbonyl group or ether group is the polyvinylpyrrolidone.

4. (Original) The patch as set forth in claim 1, wherein the content of the polymer with the carboxyl group ranges from 1% to 10% by weight; and the content of the polymer with the carbonyl group or ether group ranges from 40% to 80% by weight, based on a total dry weight of the tooth-adhering layer.

5. (Original) The patch as set forth in claim 1, wherein, in the erosion rate-controlling layer, the hydrophilic polymer is hydroxypropyl cellulose, and the film-forming polymer is a (meth)acrylic acid copolymer.

6. (Original) The patch as set forth in claim 1, wherein the content of the hydrophilic polymer ranges from 10% to 60% by weight; and the content of the film-forming polymer ranges from 5% to 65% by weight, based on a total dry weight of the erosion rate-control layer.

7. (Currently Amended) The patch as set forth in claim 3, wherein the (meth)acrylic acid copolymer is selected from the group consisting of ~~Eudragit L (methacrylic acid: methyl methacrylate= 1:1, Rohm Pharma Company)~~ poly(methacrylic acid-co-methyl methacrylate) copolymer with a monomer molar ratio of 1:1, ~~Eudragit S(methacrylic acid: methyl methacrylate= 1:2, Rohm Pharma Company)~~ poly(methacrylic acid-co-methyl methacrylate) copolymer with a monomer molar ratio of 1:2, ~~Eudragit L 100-55 (methacrylic acid: ethyl acrylate= 1:1, Rohm Pharma Company)~~ and poly(methacrylic acid-co-ethyl acrylate) copolymer with a monomer molar ratio of 1:1, ~~and Kollicoat MAE (methacrylic acid: ethyl acrylate= 1:1, BASF)~~.

8. (Currently amended) The patch as set forth in claim 5, wherein the (meth)acrylic acid copolymer is selected from the group consisting of ~~Eudragit L (methacrylic acid: methyl methacrylate= 1:1, Rohm Pharma Company)~~ poly(methacrylic acid-co-methyl methacrylate) copolymer with a monomer molar ratio of 1:1, ~~Eudragit S(methacrylic acid: methyl methacrylate= 1:2, Rohm Pharma Company)~~ poly(methacrylic acid-co-methyl methacrylate) copolymer with a monomer molar ratio of 1:2, ~~Eudragit L 100-55 (methacrylic acid: ethyl acrylate= 1:1, Rohm Pharma Company)~~ and poly(methacrylic acid-co-ethyl acrylate) copolymer with a monomer molar ratio of 1:1 ~~and Kollicoat MAE (methacrylic acid: ethyl acrylate= 1:1, BASF)~~.

9. (Original) The patch as set forth in claim 1, wherein the tooth whitening agent in the tooth-adhering layer is selected from the group consisting of hydrogen peroxide, carbamide peroxide, calcium peroxide, sodium percarbonate, sodium perborate and tetrasodium pyrophosphate peroxidate.

10. (Original) The patch as set forth in claim 1, further comprising a plasticizer which is selected from the group consisting of propylene glycol, glycerol, triethylcitrate, sorbitol and

polyethylene glycol.

11. (Currently Amended) The patch as set forth in claim 1, further comprising a peroxide-stabilizing agent which is selected from the group consisting of ethylenediaminetetraacetic acid (EDTA), citric acid, ~~Dequest~~polyphosphate phosphonates, sorbitan monolaurate (SML), sorbitan monopalmitate (SMP), sorbitan stearate, ~~solbitan~~ sorbitan monooleate (SMO), sorbitan oleate, sorbitan trioleate and POE sorbitan fatty acid ester surfactants.

12. (Original) The patch as set forth in claim 1, further comprising a condensed polyphosphate which is selected from the group consisting of sodium methaphosphate, potassium methaphosphate, sodium hexamethaphosphate, tetrasodium pyrophosphate, sodium acid pyrophosphate and sodium tripolyphosphate.

13. (Currently Amended) The patch as set forth in claim 1, wherein the tooth-adhering layer contains the erodible polymer complexes formed by hydrogen bonding of the polymer with a carboxyl group in an amount of 1~10% by weight of ~~the polymer with the carboxyl group~~ the total dry weight of the tooth-adhering layer and the polymer with a carbonyl group or ether group in an amount of 40~80% by weight of ~~the polymer with a carbonyl group or ether group~~ the total dry weight of the tooth-adhering layer; and the erosion rate-controlling layer contains a mixture of the hydrophilic polymer in an amount of 10~60% by weight of ~~the hydrophilic polymer~~ the total dry weight of the erosion rate-controlling layer and the film-forming polymer in an amount of 5~65% by weight of ~~the film-forming polymer~~ the total dry weight of the erosion rate-controlling layer.

14. (Original) The patch as set forth in claim 1, wherein a thickness of the patch ranges from 50 μm to 300 μm.

15. (Currently Amended) The patch as set forth in claim ~~13~~ 14, wherein the tooth-adhering layer has a thickness of 30 μm to 200 μm, and the erosion rate-controlling layer has a thickness of 20 μm to 100 μm.